

Notice of Allowability

Application No.

09/812,537

Examiner

Michael S. A. Delgado

Applicant(s)

MATENA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/19/2006.
2. ☒ The allowed claim(s) is/are 1-3, 7-8 and 10-20 hereafter refer to as 1-16.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 8/17/06
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Chester E. Martine, Jr. on 8/17/06.

The application has been amended as follows:

Specification

This application is related to U.S. Patent Application No. 09/812536 (Attorney Docket No. SUNMP002A), filed March 19, 2001, and "Method and Apparatus for Providing Application Specific Strategies to a Java Platform including Start and Stop Policies," which is incorporated herein by reference.

Claim 1. (currently amended) A method for load balancing in a JAVA based environment, the method comprising:

executing a JAVA application having a first service module and a control module, wherein the control module includes application-specific load-balancing policies for the application, the application specific policies are in a JAVA code form, and the application-specific policies are provided to an underlying JAVA platform without altering the JAVA platform, and the application-specific policies include a specific server on which to generate a second service module;

sensing a utilization of system resources;

generating the second service module, using the first service module, the generating of the second service module being based on the application-specific policies of the application and using the specific server, in response to the sensed utilization of system resources, wherein the specific server is selected based on the application-specific policies of the control module;

transferring a state of the first service module to the second service module; and

terminating the first service module.

Claim 2. (original) A method as recited in claim 1, wherein the operation of sensing the utilization of system resources includes polling system resources.

Claim 3. (original) A method as recited in claim 1, wherein the operation of sensing the utilization of system resources includes receiving notifications from system resources.

Claims 4-6 (canceled)

Claim 7. (currently amended) An application having application-specific strategies for use in a JAVA environment, comprising:

a plurality of service modules having functionality for the application; and

a control module in communication with the plurality of service modules, wherein the control module includes application-specific load-balancing policies for the application, the application-specific policies are in a JAVA code form, the application-specific policies are

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provided to an underlying JAVA platform without altering the JAVA platform, and the application-specific policies include a specific server on which to generate a second service module of the plurality of service modules, and wherein the second service module is to be generated using the specific server.

Claim 8. (original) An application as recited in claim 7, wherein the control module manages the service modules.

Claim 9. (canceled)

Claim 10. (previously amended) An application as recited in claim 7, wherein the application-specific policies include application-specific load balancing policies.

Claim 11. (currently amended) An application as recited in claim 10, wherein a first server module of the plurality of service modules is capable of moving to the specific_a server based on the load balancing policies.

Claim 12. (currently amended) An application as recited in claim 11, wherein the control module initiates a generation of the second service module on the specific server.

Claim 13. (original) An application as recited in claim 12, wherein a state of the first service module is transferred to the second service module.

Claim 14. (original) An application as recited in claim 13, wherein the first service module is terminated after the state of the first service module is transferred to the second service module.

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Claim 15. (currently amended) A method for moving an application within a JAVA environment, comprising the operations of:

executing a first service module and a control module of the application on a first server, the control module having application-specific policies for the application, the application-specific policies are in a JAVA code form, and the application-specific policies are provided to an underlying JAVA platform without altering the JAVA platform, and the application-specific policies include a specific server on which to generate a second service module;

sending a message from the control module to an executive runtime module, the message requesting the executive runtime module to move the first service module to the specific server according to the application-specific policies;

generating the second service module on the specific server, the second service module having a state equivalent to a state of the first service module; and

terminating the first service module.

Claim 16. (original) A method as recited in claim 15, further comprising the operation of obtaining the state of the second service module by a direct transfer from the first service module.

Claim 17. (original) A method as recited in claim 15, further comprising the operation of obtaining the state of the second service module by using a state server that is shared with the first service module.

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Claim 18. (currently amended) A method as recited in claim 16, wherein the message from the control module to the executive runtime module includes an identity of the specific server.

Claim 19. (original) A method as recited in claim 15, further comprising the operation of disabling requests to the first service module.

Claim 20. (original) A method as recited in claim 19, further comprising the operation of enabling requests to the second service module.

Reason For Allowance

1. Claims 1-3-7-8 and 10-20 are allowed.
2. The following is an examiner's statement of reasons for allowance: The closest prior art of record (US Patent No. 6,167,427 by Rabinovich et al) does not teach nor suggest in detail using a control module that uses an application-specific policies in selecting a specific server on which to generate a second service module of the plurality of service modules using a first service module in combination with all the elements of each independent claim as argued by the Applicant (See Pages 17-18 of Applicant enabling specification, Page 2 line 10–Page 4 line 10 of argument presented 5/19/2006). Rabinovich only teaches about a creating replication (similar to Applicant creation process) to support a load balancing system. Whereas as claimed by the Applicant, the application control module uses application-specific policies to select a specific server in generating a replacement module. This approach has the advantage of being more dynamic and specific in the creation of child application. So as indicated by the above statements, Applicant's arguments have been considered persuasive in light of the claim limitations as well as the enabling portions of the specification.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

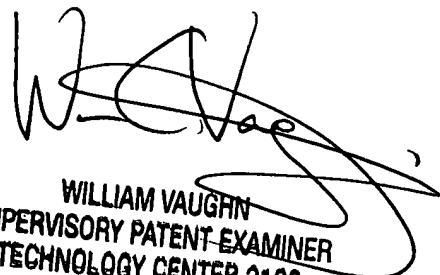
Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is (571) 272-3926. The examiner can normally be reached on 7.30 AM - 5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn Jr. can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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